

WHAT IS CLAIMED IS:

- 1 1. A joint prosthesis for implantation in a patient, comprising:
2 a body having a central canal extending therethrough; and
3 a shaft coupled to the body and extending through the central canal,
4 wherein the shaft is interchangeable after implantation of the prosthesis by removing
5 the shaft and replacing the shaft with a replacement shaft without dislodging the body
6 from the patient.
- 1 2. The joint prosthesis of claim 1, wherein the shaft is coupled to the
2 body via insertion of the shaft through an end of the central canal nearest an articular
3 surface of the prosthesis and the shaft is removed from the body by reversing the
4 direction of insertion.
- 1 3. The joint prosthesis of claim 2, wherein the shaft is coupled to the
2 body via a taper lock between the shaft and the body.
- 1 4. The joint prosthesis of claim 3, wherein the taper lock is a Morse taper
2 lock.
- 1 5. The joint prosthesis of claim 1, wherein the joint prosthesis is
2 configured to replace a hip joint.
- 1 6. The joint prosthesis of claim 1, wherein the joint prosthesis is
2 configured to replace a shoulder joint.
- 1 7. The joint prosthesis of claim 1, wherein the replacement shaft is an
2 intramedullary nail.
- 1 8. The joint prosthesis of claim 1, wherein the replacement shaft is longer
2 than the shaft.
- 1 9. The joint prosthesis of claim 1, further comprising an insert coupled to
2 the body and extending at least partially into the central canal.

1 10. The joint prosthesis of claim 9, wherein the insert is screwed into the
2 central canal.

1 11. A modular joint prosthesis having an articular surface for implantation
2 in a patient, comprising:

3 a stem coupled to the articular surface, the stem comprising a proximal
4 portion nearest the articular surface and a distal portion configured to extend into a
5 long bone of the patient;

6 wherein the distal portion may be removed from the stem after
7 implantation of the prosthesis without also removing the proximal portion.

1 12. The modular joint prosthesis of claim 11, further comprising a central
2 canal in the proximal portion in which the distal portion is received.

1 13. The modular joint prosthesis of claim 12, wherein the distal portion is
2 coupled to the proximal portion via insertion of the distal portion through an end of
3 the central canal nearest the articular surface and the distal portion is removed from
4 the proximal portion by reversing the direction of insertion.

1 14. The modular joint prosthesis of claim 13, wherein the distal portion is
2 coupled to the proximal portion via a taper lock between the distal portion and the
3 proximal portion.

1 15. The modular joint prosthesis of claim 12, further comprising an insert
2 coupled to the proximal portion and extending at least partially into the central canal.

1 16. The modular joint prosthesis of claim 15, wherein the insert is screwed
2 into the central canal.

1 17. The modular joint prosthesis of claim 11, wherein the joint prosthesis
2 is configured to replace a hip joint.

1 18. The modular joint prosthesis of claim 11, wherein the joint prosthesis
2 is configured to replace a shoulder joint.

1 19. A method of replacing a shaft of a joint prosthesis having a body and a
2 shaft after the joint prosthesis has been implanted in a patient, comprising:
3 creating an access aperture in the patient for access to the joint
4 prosthesis;
5 removing the shaft from the patient without removing the body;
6 inserting a replacement shaft into the patient;
7 coupling the replacement shaft to the body;
8 locking the replacement shaft into place in the patient; and
9 closing the access aperture.

1 20. The method of claim 19, wherein the body has an aperture configured
2 to receive the shaft or the replacement shaft and wherein the coupling step includes
3 inserting the replacement shaft into the aperture.

1 21. The method of claim 20, further comprising coupling an insert to the
2 body, the insert extending at least partially into the aperture.

1 22. The method of claim 19, wherein the replacement shaft is an
2 intramedullary nail.

1 23. The method of claim 19, wherein the replacement shaft is longer than
2 the shaft.

1 24. The method of claim 19, wherein the shaft is removed with the aid of a
2 shaft removal device.

1 25. A modular joint prosthesis system, comprising:
2 a body;
3 an articular surface;
4 a first shaft configured to be coupled to the body; and
5 a second shaft configured to be coupled to the body, wherein the
6 second shaft is used to replace the first shaft after implantation of the prosthesis into a
7 patient without first removing the body from the patient.

1 26. The modular joint prosthesis system of claim 25, wherein the first shaft
2 is coupled to the body via insertion of the first shaft through an end of a central canal
3 in the body nearest the articular surface and the shaft is removed from the body by
4 reversing the direction of insertion.

1 27. The modular joint prosthesis system of claim 26, wherein the second
2 shaft is coupled to the body via insertion of the second shaft through the end of the
3 central canal nearest the articular surface.

1 28. The modular joint prosthesis system of claim 25, wherein the shaft is
2 coupled to the body via a taper lock between the shaft and the body.

1 29. The modular joint prosthesis system of claim 28, wherein the taper
2 lock is a Morse taper lock.

1 30. The modular joint prosthesis system of claim 26, further comprising an
2 insert coupled to the body.

1 31. The modular joint prosthesis system of claim 30, wherein the insert is
2 screwed into the central canal.

1 32. The modular joint prosthesis system of claim 25, wherein the joint
2 prosthesis is configured to replace a hip joint.

1 33. The modular joint prosthesis system of claim 25, wherein the joint
2 prosthesis is configured to replace a shoulder joint.

1 34. The modular joint prosthesis system of claim 25, wherein the second
2 shaft is an intramedullary nail.

1 35. The modular joint prosthesis system of claim 25, wherein the second
2 shaft is longer than the first shaft.

1 36. The modular joint prosthesis system of claim 25, further comprising a
2 shaft removal device configured to be coupled to the first shaft.

1 37. The modular joint prosthesis system of claim 36, wherein the first shaft
2 includes a threaded recess and the shaft removal device includes a threaded portion
3 configured to be screwed into the threaded recess to couple the shaft removal device
4 to the first shaft.

1 38. The modular joint prosthesis system of claim 25, further comprising a
2 head coupled to the body, the head having the articular surface.